SECTION 04150
MASONRY ACCESSORIES

PART 1 - GENERAL

1.1 QUALITY ASSURANCE

A. Welding Standard: Perform welding in accordance with applicable provisions of AWS Structural Welding Code D1.1.

B. ASTM standards indicated.

1.2 SUBMITTALS

A. Project information:
   1. List of products proposed for use.

1.3 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Store materials under cover in a dry place and in a manner to prevent damage.

B. Immediately before placing, clean reinforcement of substances detrimental to good bond.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Acceptable manufacturers:
   1. Masonry anchors:
      a. Base:
         1) Hohmann & Barnard.
      b. Optional:
         1) Dur-O-Wal.
         2) Heckmann Building Products.
   2. Veneer anchor system:
      a. Base:
         1) Hohmann & Barnard.
   3. Horizontal joint reinforcing:
      a. Base:
         1) Hohmann & Barnard.
   4. Flexible rubberized-asphalt through-wall flashing:
      a. Base:
         1) Hohmann & Barnard.
      b. Optional:
         1) Dur-O-Wal.
         2) W.R. Grace.
         3) Polytite.
         4) Polyguard.
         5) Williams.
   5. Metal through-wall flashing:
      a. Base:
         1) Hohmann & Barnard.
      b. Optional:
         1) Cheney.
         2) Keystone.

6. PVC tube weeps:
   a. Base:
      1) Hohmann & Barnard.
7. Premolded control joint strips:
   a. Base:
      1) Hohmann & Barnard.
8. Termination bars:
   a. Base:
      1) Hohmann & Barnard.
9. Galvanizing repair paint:
   a. Base:
      1) ZRC Products.
   b. Optional:
      1) Tnemec.
10. Compressible filler:
   a. Base:
      1) Hohmann & Barnard.
11. Cavity protection material:
   a. Base:
      1) Mortar Net.
12. Other manufacturers desiring approval comply with Document 00440.

B. Anchors, veneer:
   1. Provide two-piece seismic masonry-veneer anchor assemblies that allow vertical adjustment but resist tension and compression forces perpendicular to plane of wall, for attachment over sheathing to metal studs.
      a. Capable of withstanding 100 LBF load in both tension and compression without deforming or developing play in excess of 0.05 IN.
      b. Adjustable for minimum vertical movement of 1-3/4 IN.
   2. Seismic masonry-veneer anchors: Units consisting of a metal anchor section and a connector section designed to engage a continuous wire embedded in the veneer mortar joint.
      a. Anchor section: Gasketed sheet metal plate with screw holes top and bottom; top and bottom ends bent to form pronged legs to bridge insulation or sheathing and contact studs; and raised rib-stiffened strap stamped into center to provide a slot between strap and plate for connection of wire tie.
         1) Plate: 1-1/4 IN wide by 6 IN long with strap 5/8 IN wide by 6 IN long; slot clearance formed between face of plate and back of strap shall not exceed diameter of wire tie by more than 1/32 IN.
         2) Provide anchor manufacturer’s standard, self-adhering, modified bituminous gaskets manufactured to fit behind anchor plate and to prevent moisture from penetrating sheathing at pronged legs and screw holes; Hohmann & Barnard Textroseal.
      b. Connector Section: Triangular wire tie and rigid PVC extrusion with snap-in grooves for inserting continuous wire.
         1) Size wire tie to extend at least halfway through veneer but with at least 5/8 IN cover on outside face.
         2) Hohmann & Barnard Byna-tie.
      c. Fabricate sheet metal anchor sections and other sheet metal parts from 0.1094 IN thick stainless steel sheet.
      d. Fabricate wire connector sections from 0.25 IN diameter stainless steel wire.
      e. Continuous wire: Minimum 0.1875 IN diameter stainless steel wire.
      f. Hohmann & Barnard DW-10-X series with Seismiclip tie/reinforcing clip.

3. Steel drill screws for steel studs: ASTM C 954 except manufactured with 16 x 1-1/2 IN hex washer head and neoprene sealing washer, No. 10 diameter by length required to penetrate steel stud flange by not less than 3 exposed threads, and with the following corrosion protective coating.
    a. Organic polymer coating with salt-spray resistance to red rust of more than 800 hours per ASTM B117.

C. Joint reinforcing, horizontal:
1. Cold drawn steel wire, ASTM-A641.
2. 3/16 IN side rods.
3. 9 GA cross rods.
4. In interior walls: ASTM-A641, Class 1.
5. In exterior walls: Stainless steel.
6. Design:
    a. Prefabricated corner and tee sections, minimum leg length 32 IN.
    b. Single walls: Hohmann & Barnard 120, truss.
    c. Veneer and cavity walls: Hohmann & Barnard. 265, ladder.
    d. Masonry with stud wall backup: Single wire, 3/16 IN diameter.

D. Reinforcing bars: ASTM-A615, Grade-60.

E. Bond breaker strips: Asphalt saturated felt, unperforated; ASTM-D226, Type 1.

F. Weeps: Either rope or PVC tube.
1. Rope, nominal 3/8 IN.
2. PVC tube, 3/8 IN diameter; Hohmann & Barnard 341.

G. Flexible rubberized-asphalt through-wall flashing:
1. Fully adhered 40 mil rubberized asphalt with integrally bonded high density, cross-laminated polyethylene.
    a. Hohmann & Barnard Textroflash.
2. Width as required for no horizontal seams.
3. Factory precut wherever possible.
4. Provide with end dams at ends of runs.

H. Metal through-wall flashing.
1. Minimum 0.0156 IN thick stainless steel flashing for concealed use.
2. Minimum 0.0236 IN thick stainless steel flashing with hemmed drip edge bent down 30 degrees at edges where exposed.
    a. Hohmann & Barnard MFL.
3. Fabricate with ribs at 75-mm 3 IN intervals along length of flashing to be embedded, to provide integral mortar bond.
4. Factory precut wherever possible.
    a. Provide end dams at ends of runs.
    b. Drip plate for use with flexible concealed flashing.

I. Flashing adhesive: As recommended by manufacturer for sealing laps and sealing to vertical surfaces.

J. Premolded control joint strips:
1. Solid rubber strips with a Shore A durometer hardness of 60 to 80.
2. Designed to fit standard sash block and maintain lateral stability in masonry wall.
3. Size and configuration as indicated.
4. Hohmann & Barnard RS Series.

K. Rigid steel anchors: Fabricated from ASTM-A36 steel bars.
1. Minimum 1/4 IN thick x 1-1/2 IN wide x 24 IN long.
2. Ends turned up 2 IN or with cross pins.
3. Hot-dipped galvanized to comply with ASTM-A153, G90.

L. Termination bar:

1. Stainless steel unit.
2. Surface type.
3. Hohmann & Barnard No. T2.

M. Galvanizing repair paint: High zinc dust content paint for regalvanizing welds and abrasions in galvanized steel.
   1. Base manufacturer's product: ZRC by ZRC Products.
   2. Optional manufacturer's product: Tnemec organic zinc coating 90-93.

N. Compressible filler:
   1. Closed cell neoprene sponge.
   2. 1/4 IN thick.
   3. Hohmann & Barnard NS.

O. Cavity protection material:
   1. 2 IN thick non-directional extruded polyethylene fiber.
   2. 10 IN high.
   3. Fabricated from 100 percent recycled material.
   4. Green color.
   5. Mortar Net-Green.

PART 3 - EXECUTION

3.1 INSTALLATION OF ANCHORAGES

A. Meeting and intersection masonry walls:
   1. Where bearing walls meet or intersect, erect walls separately and anchor together with rigid steel anchors spaced not more than 24 IN apart vertically.
   2. Embed end bends of anchors in cores of masonry units filled with mortar or grout.
   3. Where non-bearing walls meet or intersect other walls, erect walls separately and anchor together with wire mesh ties spaced not more than 16 IN apart vertically.
   4. Embed ties centered in mortar within joint.

B. Anchorage to structure:
   1. Fill solid with mortar or grout masonry unit cells within vertical planes of anchors, or use solid masonry units above and below anchors.
   2. Anchor masonry facing to structural steel framing with flexible wire ties and weld on anchor rods.
   3. Anchor masonry veneer to backing with metal ties suitable for condition of installation.
   4. Provide sufficient anchors to have minimum of 1 anchor per 1.77 SF of wall area; with neither vertical nor horizontal spacing exceeding 16 IN OC.
   5. Where 2 IN thick units are used as furring against columns or walls, anchor furring units to backing with metal ties suitable for condition.

3.2 INSTALLATION OF OTHER ACCESSORIES

A. Through wall flashing:
   1. Install to provide positive drainage of cavity moisture.
   2. Coordinate with built in items.
   3. Terminate rubberized asphalt flashing 1/2 IN from exterior face of wall.
   4. Gypsum sheathing backup:
      a. Extend up face of sheathing minimum 8 IN.
      b. Adhesively apply at gypsum sheathing back-up.
      c. Extend wall felts over face of flashing where felts occur.
   5. Lap rubberized asphalt and metal flashing minimum of 4 IN and bond 2 pieces together with flashing adhesive.
   6. Provide end dams.
   7. Adhere rubberized asphalt flashing to metal flashing with approved adhesive.

8. Seal under ledge angle with approved backer and sealant.
9. Expose hemmed drip edge of metal flashing.

B. Provide weeps directly above flashing system.
   1. Space weepholes maximum 16 IN apart horizontally.
   2. Keep vertical joint behind weeps free of mortar.
   3. Rope weeps:
      a. Grease rope wicks prior to installation.
      b. Pull rope wicks out after mortar has set.
   4. PVC tube weeps: Keep weepholes and area above flashing free and clean of mortar.

C. Cavity protection material:
   1. Install per manufacturer's recommendations at ledge angles and bottom of wall.

END OF SECTION